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Understanding the concept of representation within the context of local forest management decision making

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Abstract

Public involvement in forest management decision making has become more and more prevalent. With this growth, a large body of literature has emerged that examines ideal forms of public participation processes. Despite these scholarly advances, it is argued that the literature fails to account for the full concept of representation, which is relegated to a one-dimensional interpretation based on the correspondence of the representatives and their constituents, known as descriptive representation. In this paper, a statistical comparison of Alberta-based Public Resource Advisory Groups and the provincial general public is provided. The results are indicative of other similar studies where differences in socio-demographic characteristics and belief and values between the public and representative groups exist. However, in the second part of the paper, a full theoretical treatment of representation is given. In addition to descriptive representation, two other forms of representation are introduced: the representation of subjective interests and the representation of objective interests. Both provide a different interpretation of what constitutes representation and has important consequences for an understanding of forest-management decision making.
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1. Introduction

The improvement and/or expansion of public involvement are lauded as critical components of sustainable forest management (SFM) decision-making. For example, in Canada, a key Federal–Provincial policy initiative, the Criteria and Indicators (C&I) framework, states that public participation will incorporate the full range of social values in decisions and the responsiveness of institutions to change in values over time... (Canadian Council of Forest Ministers, 1999). Similarly, at a provincial level, the Government of Alberta's *Alberta Forest Legacy: Implementation for sustainable forest management* states that effective public involvement requires the decision-making processes be developed in order to ensure the that local values and the planning process are balanced... (Government of Alberta, 1999).

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This trend exhibited in Canada and Alberta is typical in nearly all European and North American countries and is part of a larger political process where central decision-making institution's diminished organisational and resource capacities have led to devolution of decision-making responsibilities to local groups. More significantly, at the same time, local level groups have emerged as the result of localised issues that central agencies are unable to address. This trend towards greater local public participation should generate some important political debates about key aspects of democratic theory. There are several key areas to consider. These include the debate on direct vs. representative democracy, defining a 'common' interest, and differentiating between public and private interest. In this paper, a largely conceptual analysis of a particularly important aspect of democratic theory is highlighted. By doing so, the complexities of local decision-making with an ever-growing decentralised political system may be appreciated.

A key aspect of local public involvement and its role in democratic theory is criticised, namely the common misuse of the concept of representation. Most of the literature addressing relationships between representation and public participation in natural resource management contains assumptions that are incomplete and therefore problematic. The goal of this paper is to remedy this shortcoming by expanding the current understanding of representation at the local level.

1.1. The push for public participation

In Alberta, calls for public participation have had an impact at the local forest level. Since 1991, all Alberta based Forest Management Agreement (FMA) holders have been required to facilitate Public Resource Advisory Groups (PRAGs) in order to improve the level of public involvement on their lease holdings (The Proceedings Forest Resource Advisory Group, 1999). These groups are the focal point of this paper. In total, there are 14 PRAG groups currently in operation throughout Alberta. PRAG membership is voluntary with members, usually 15–20 in number, representing a wide variety of different community-based organisations and interests (i.e. municipal, provincial, and federal governments, chambers of commerce, unions, senior citizens, recreation groups, etc.). Some PRAGs have also allocated public-at-large memberships where no particular interest is represented. The primary role of a PRAG is to provide advice to forest companies regarding their forest management planning process (i.e. cutblock size, road infrastructure, protected areas). Although these groups do not have final management authority, they do provide input and information that is implemented into forest management activities.

With this interest in enhancing the public participation process, there has been a spate of scholarly examinations and critiques of the process. Recently, Beckley (1999) reviewed and critically examined a number of different public involvement strategies in the Foothills Model Forest (FMF)[1]. This evaluation, based on previous studies (e.g. Duinker, 1998; Gundry and Heberlein, 1984; Lawrence and Daniels, 1996; McComas, 2001; Shindler and Neburka, 1997; Steelman and Ascher, 1997), considered the quality of participation (as opposed to quantity), full interaction (two-way flow), using information in the decision-making process, involving the decision makers directly, the establishment of a clear mandate, adaptability and flexibility in the process, and working with good information as the criteria for public participation effectiveness.

1.2. Representation

Surprisingly, one area of research that has been given limited attention is that of understanding the concept and consequences of representation. Representation is usually introduced as an important goal of any public participation process but is given only a superficial level of analysis. The popular conception of desirable representation in the public involvement literature is one in which the values, attitudes, and socio-economic charac-

[1] The FMF, a 2.75 million hectare area that encompasses Weldwood of Canada's Forest Management Agreement (FMA) Jasper National Park, Wilmore Wilderness Area, and the towns of Hinton and Jasper located in west-central Alberta 300 km west of Edmonton, is one of eleven Model Forests located across Canada. They are to act as areas where new and innovative methods of forest management are practiced.

104-05980/

teristics of those involved in the public involvement process correspond to those of the general public. Beckley's comment is typical of the literature, namely that 'the public involvement bodies should be representative of the desired target population.' When it comes to representation, many local public participation processes are flawed because they do not necessarily reflect public values (Beckley, 1999, p. 10–11).

Other researchers have raised similar concerns about the need for a direct correspondence between public involvement processes and representation. Knopp and Caldbeck (1990) state that '[i]t is not enough to assume that volunteer organisations or public interest groups will adequately or fairly represent the total spectrum of public values' (1990, p. 15). Tanz and Howard (1991) argue that the management of crown land should reflect society's preferences. Shindler et al. (1993) state that it is important for policy makers to balance the values of well established interest groups with those of the—in their case, the Oregon—public at large. They further their argument stating that responsive solutions require strategies that involve a broad-based, representative public. (Shindler et al., 1993, p. 39) concurs, saying that when evaluating public participation using social goals, processes should 'reflect the larger public they seek to represent' Knopp and Caldbeck (1990).

It is argued that statements such as these reflect only a partial understanding of the concept of representation as evident in Hanna Pitkin's *The Concept of Representation* (Pitkin, 1967). This work is widely acknowledged as the authoritative work on representation. Pitkin's work originally examined national and state wide examples of representation; the same concepts at the local non-governmental level are applied here. The conception of representation found in the natural resource literature falls under the category called *descriptive* representation. Descriptive representation is the process of being like something for somebody; that is the representatives mirrors who they are representing. This requires a correspondence between the representative and his or her constituents. For example, from the above natural resource public participation literature, one would expect that rural areas with large number forest workers who are in favour of the local pulp mill expanding would contain a public involvement group comprising forestry workers who share the same values. However, descriptive representation is only one of three major types of representation. In addition to *descriptive* representation, two other forms of representation exist: the representation of attached subjective interests and the representation of objective unattached interests. These forms are conceptually important and have been neglected in the research cited above. It is suggested that representation can exist despite wide differences in the socio-economic background and values and beliefs of representatives and their constituents.

In this paper, a theoretical overview of descriptive, subjective, and objective forms of representation is provided. It is established that representation can have different and potentially conflicting meanings depending on the type emphasised. This is followed by a statistical comparison of socio-economic variables and the beliefs and attitudes of Alberta residents with those who are charged with representation in resource management decisions: PRAG members from across Alberta. The findings from these statistical comparisons are similar to the findings made by Gundry and Heberlein (1984) and McComas (2001): representatives are different from the public and the values they are supposed to represent. However, the statistical analysis presented becomes but a corollary to a larger underlying theoretical debate about the underlying theoretical underpinnings of public participation and democratic theory. In the final section, there is discussion of possible tensions between the different forms of representation and between group differences.

2. Theoretical overview of representation

2.1. Descriptive representation: 'standing for' vs. 'acting for'

Descriptive representation occurs when representatives take on the same image as their constituents. Under this view, any forum should be an exact miniature of its constituents at large. For example, advocates of proportional government

(who present the same arguments as Beckley 1999 and others) argue that representation 'must correspond in composition with the community...because you want to get a reflection of the general opinion of the nation' (Pitkin, 1967, p. 62). Although logically plausible, this approach pays little attention to the role of accountability in the representation process. Pitkin writes, that '[i]n any case, a man can only be held to account for what he has done, not for what he is' (1967, p. 90). Thus, from this perspective, there is no room for leadership, initiative, or creative action. The defining feature of the representative is being something rather than *doing* something. Mansbridge argues that a good representation should advance as well as possible the constituents' *substantive interests* (our emphasis) and preferences, not simply mirror their demographic characteristics (Mansbridge, 1996, p. 3). Rather than standing for as in the case of descriptive representation, Pitkin argues for representation that is 'acting for'. This requires an understanding of representation as an activity or a series of behaviours, rather than merely embodying a series of static characteristics. Moreover, advocates of descriptive representation tend to separate representation and the desire for proportionality from the actual actions of governing. The activity of representing as acting for others must be defined 'in terms of what the representative does and how it is carried out'. Representatives are rarely ordinary people. Thus it is important to distinguish the actions representing from representativeness. In many cases, there is a often a gap between the two. Pitkin succinctly defines the key flaw of descriptive representation.

> We tend to assume that people's characteristics are a guide to the actions they will take, and we are concerned with the characteristics of our legislators for just this reason. But it is no simple correlation; the best descriptive representative is not necessarily the best representative for activity or government. Griffiths points out that a lunatic may be the best descriptive representative of lunatics, but one would not suggest that they be allowed some of their numbers to the legislature. In the same way, while we might well wish to complain that there are not enough representative members of the working class among Parliamentary representatives, we would not want to complain that a large class of stupid or maleficent people have too few representatives in Parliament: rather the contrary. If we are interested in information about the public, the ideal of perfect reflection or resemblance does no harm, but if our concern is with political action by our representatives, the idea of accuracy is likely to mislead (Pitkin, p. 89).

While Pitkin was describing the problems of descriptive representation in nationally elected political bodies, it is even more the case of locally based natural resource public participatory organisations such as PRAGs whose members are chosen because they are supposed to be like others in their respective local area. In both cases, the independence of the representative becomes an important consideration.

> Their purpose should be to act with a degree of independence in carrying out the mandate of those entire population. The representative must act in such a way that, although he is independent, and his constituents are capable of action and judgement, no conflict arises between them (Pitkin, 1967, p. 166).

Before introducing the two other forms of representation, a further complication arises from the above passage. A common assumption by many is that constituents must be individuals. Again this is the typical point advocated by descriptive representation. However, as an activity, representation (acting for) may include subjective and objective interests which may not necessarily correspond to a larger population or even to people themselves. Pitkin states that interests take on dual meanings. In one sense, an interest takes on an adjectival form, an action that is to someone's interests, as having a stake reveals that somebody has an objective interest. In other words, a conservationist in a local Alberta community has an interest in a particular cause such as the well being of the forest because they wish to ensure its longevity. This person wishes to act in the interest of the forest, an inanimate object. An interest can also take on psychological properties. Thus, we can take an interest in a particular cause or find something interesting. That interest becomes attached to the desires of an individual only because they choose to have a stake in it. This duality between attached objective interests and an unattached subjective interest defines how representatives carry out the

actions of representing. Therefore, the analyst must consider the substantive issues surrounding representation, whether it is to act according to the wishes of or to act in the interest of. Below, the key tenets of both these approaches of acting for somebody or something are outlined.

2.2. The representation of subjective interests

Representation as an activity is very apparent when we view it as acting for a subjective interest. Acting for subjective interests has its roots in the liberal thought of James Madison (United States, 1911) (in the *Federalist Papers*) and the British Utilitarians (Bentham, 1983; Mill, 1861). They argued that the interests of something or someone should be the deciding factor in determining what is represented. Interests become attached and subjective when that interest is 'what men feel' (Pitkin, 1967, p. 89). Their interest 'a number of citizens whether accounting to a majority or a minority of the whole, who are united and actuated by some common impulse of passion, of interest, adverse to the right of other citizens, or to the permanent and aggregate interest of the community' (Pitkin, 1967, p. 193). There is a plurality of interests that are constantly shifting and are identified with many competing factions throughout society. Left unchecked, Madison considered these factions of interest to be a potentially evil force that would result in destructive conflict. However, representation could render such factions harmless by acting as a filter to 'enlarge the public views, by passing them through the medium of a chosen body of citizens...' (United States Constitutional Convention (1787), United States, 1911, p. 45). In such a forum, competing interests can be controlled and balanced against the larger public good. Furthermore, Madison advocated the involvement of many disparate interests to create 'a large and diverse state' where no one interest could dominate. Under such circumstances, Madison hoped that the 'mild voice of reason' would prevail over the immediate selfishness of individual groups. Bentham (1983) and Mill (1861) take the concept of subjective interests even further by arguing that only individuals (as opposed to groups or factions) can define their subjective interests. A 'common good', they argue, can not emerge from private pursuits. Instead, Bentham argues that there are 'universal interests' that are public by nature (Bentham, 1983, p. 2). These are simply the aggregate of all the individuals within a particular community. In such a case, 'a community cannot have any interest opposite to its interests' (Mill, 1861, p. 69). Thus, there exist two types of Utilitarian interests, which originate in the individual: private selfish interests and shared public ones. Representation of public interests becomes important in order to promote the utility of all individuals in society.

2.3. The representation of unattached objects

The third form of representation is that of unattached objects. In her analysis, Pitkin borrows heavily from the work of the English conservative philosopher Edmund Burke. Unattached objects are impersonal, broad, relatively fixed objects such as the economy or the environment. Thus, in the case of an economic interest such as agriculture, Burke considered the sector's interests rather than the interests of the farmers to be the object of representation. This he labelled as 'virtual' representation.

> Although the city of Birmingham elects no members to Parliament, it can still be virtually represented there because Bristol sends members; and these are really representatives of the trading interest, of which Birmingham, too, is a part (Burke, 1949, p. 618).

As a result, Burke discounted the opinions of people or groups as the basis of representation, he found merit in the *feelings* of a nation as opposed to competing groups in the case of Madison. Burke elaborates upon the importance of feelings.

> Unlike opinions, feelings are reliable; and people are seldom mistaken when they perceive a pain or symptom, be it physical or political. It is only when they attempt to speculate abstractly on the basis of what they feel that they go astray into opinion...Hence it is important for the people's feelings to be transmitted accurately to the government (Burke, 1949, pp. 492–493).

For Burke, opinion was contrary to the long-term interest and benefit of a group, constituency or nation. As result, 'opinion tended to be hasty, passionate, prejudiced, subject to violent but short lived fluctuations' (Pitkin, 1967, p. 181). Burke argued that good government emerged from the 'reasoning of wise and intelligent men, and not the so-called will of the public' whose interests are common to all (Pitkin, 1967, p. 181).

This brief theoretical overview of the three competing types of representation brings into question both the nature and role of PRAGs. Using Pitkin's work, the inadequacy of a critique of any representative body primarily based on only one form of representation is highly inadequate has been firmly established. Most analyses of public involvement can be thought of as solely addressing descriptive representation.

In the following sections a statistical comparison of the socio-demographic characteristics and general attitudes towards forest management of PRAG members and the general population is undertaken in order to assess descriptive representation in a manner consistent with those previous analyses. The results reveal that indeed, the descriptive representation does not exist. However, based on the theoretical evidence presented above, we suggest that such assertions are hardly sufficient to wholly assess the effectiveness of public involvement.

3. Data and methods

3.1. The study populations and samples

Data for the statistical comparison came from two 1999 surveys of Alberta residents and PRAG members. The general population sample for the *Public Involvement in Alberta Forest Policy and Management* study was chosen from a random sample of Alberta residents.[2] Ten days after the mail-out, reminder postcards were sent, and approximately 4 weeks after the initial mailing a second questionnaire was sent to those who had not yet responded. Because of the small population of PRAG members the entire possible population of 162 was sent a questionnaire. Questionnaires were mailed to 1000 Alberta residents in June, 1999 and PRAG members in August, 1999. In the general population sample, 609 questionnaires were returned, for a 60.9% response rate. In the PRAG sample, 72 questionnaires were returned for a 45% response rate.[3] The PRAG surveys were distributed by the forest company co-ordinators of each public advisory group to their respective members.

[2] The communities in or near the Foothills Model Forest were over-sampled to allow statistical comparisons between Foothills Model residents and other residents in the province. Of the total 1000 survey participants, 200 were from the Foothills Model Forest area (Parkins et al., 2001).

4. Results: comparing PRAGS and the general public

Using the common lens of descriptive representation, how do PRAGS and the general public differ? Three domains were compared: (1) socio-economic characteristics; (2) attitudes towards public involvement in forest management decision-making; and (3) beliefs and attitudes toward policy influences.

4.1. Socio-economic characteristics

The frequency distributions measuring PRAG and general population respondent's age, gender, education, and level of income were compared. Respondents were also asked whether or not a member of their household was reliant on the natural resource industry or a government natural resource agency for their livelihood. There appears to be substantial socio-demographic differences between PRAG members and the Alberta general population in terms of gender, age, income, and reliance of family members on the natural resource sector. Most of the PRAG members (82.9%) were male whereas the general population was nearly equally spilt between males and females (Table 1). PRAG members were of higher socio-economic status than the general population. A large proportion of PRAG members (55.6%) had household incomes greater than $70 000 but few reported

[3] The lower response rate for the PRAG survey is largely due to the absence of a follow-up reminder letter and survey.

Table 1
Gender distribution (%)

Gender	General population ($n=537$)	PRAG members ($n=64$)
Male	48.3	82.9
Female	51.7	17.1

incomes less than $40 000. In comparison, the public sample had much modest income levels, equally split among the income categories (Table 2).

PRAG members also reported higher education levels than the general public: nearly two-thirds have some university education vs. nearly one-third of the general public (Table 3). Finally, PRAG members or members of their households were more reliant (66.2%) on the natural resource industry or a government agency for their economic livelihood. Two-thirds of PRAG members are reliant on these sectors vs. one-third of the general public (Table 4). Thus, PRAG members tend be males, have higher income and educational levels, and are reliant on the forest industry for their livelihood. This review of the background variables suggests that PRAG members constitute a socio-economic elite group and fail to meet the criteria set out by those advocating descriptive representation in natural resource related public involvement forums.

4.2. Attitudes towards level of involvement in forest management activity

A three-point attitudinal scale (ranging from 'too much' = 1 to 'not enough' = 3) was developed to measure the respondent's attitudes towards the level of public involvement in various aspects of forest management. Such management practices included industrial activities such as logging and pulp and paper operations to non-industrial activity such as protected lands and tourism activities. Attitudes about the level of public involvement in a variety of different forest management activities were compared. A factor analysis of the statements was undertaken which was followed by an independent samples *t*-test comparison of the new factored variables.

Three of the differences were statistically significant. Relative to PRAGs, the general population thought not enough was being done to promote public involvement in allocating land for protection, nor in designing and monitoring of public involvement processes and programs (Table 5). In Table 6, the factor analysis of these statements identified two distinct groupings, timber related activities and non-timber related activities. The mean scores of two new variables for the Alberta general population and PRAG samples were calculated and compared in Table 7. Attitudes toward perceived level of involvement in timber related activities were nearly identical between the two groups. However, the general population believed that not enough public participation was occurring in non-timber related activities.

Table 2
Distribution of total household income (%)

Annual household income ($)	General population ($n=537$)	PRAG members ($n=64$)
Less than 40 000	31.1	12.7
40 000–69 999	34.3	31.7
70 000 or more	34.6	55.6

Table 3
Distribution of education levels (%)

Education level (%)	General population ($n=554$)	PRAG members ($n=70$)
High school or less	32.5	15.7
Trade or other non-university	29.8	20
Some university	37.7	64.3

Table 4
Distribution of dependence on natural resource industry/government agency for economic livelihood (%)

Dependence on natural resource industry or government agency for economic livelihood	General population ($n=700$)	PRAG members ($n=72$)
Yes	33.8	60.3
No	66.2	39.7

Table 5
Comparison of PRAG and general public involvement means in specific forest management activities

Forest management activities	PRAG	General population	Significance
Allocating forested land for logging	2.32 (0.69)	2.20 (0.85)	
Allocating forested land for protection	2.30 (0.70)	2.68 (0.54)	
Developing recreational and tourism activities in forested areas	2.34 (0.59)	2.36 (0.70)	$P<0.001$
Logging operations	2.24 (0.66)	2.07 (0.85)	
Pulp and paper operations	2.23 (0.66)	2.05 (0.83)	
Designing specific public involvement	2.54 (0.65)	2.77 (0.46)	$P<0.001$
Monitoring the outcome of public involvement processes	2.60 (0.61)	2.79 (0.45)	$P<0.01$

Table 6
Factor analysis for levels of public involvement in specific forest management activities

Activities	Timber related activities $P=0.926$	Non-timber related activities $P=0.778$
Allocating forested land for logging	0.916	
Logging operations	0.951	
Pulp and paper operations	0.952	
Allocating forested land for protection		0.731
Designing specific public involvement		0.861
Monitoring the outcome of public involvement processes		0.900
Mean (PRAG)	2.28	2.50
Mean (General Public)	2.10	2.73

Table 7
A comparison of mean scores measuring organisational influence on the forest management process

Organisation	PRAG	General public	Significance
Provincial government	3.93 (0.31)	3.76 (0.51)	$P<0.01$
Forest industry	3.88 (0.32)	3.81 (0.42)	$P<0.05$
Energy industry	3.21 (0.76)	3.43 (0.69)	
Forest scientists	3.08 (0.62)	3.09 (0.67)	
First Nations	2.99 (0.76)	2.87 (0.85)	
Conservation or environmental groups	2.94 (0.68)	2.98 (0.72)	
Recreation users	2.65 (0.74)	2.45 (0.80)	$P<0.05$
Federal Government	2.61 (0.77)	3.24 (0.74)	$P<0.001$
Urban residents of Alberta	2.52 (0.85)	2.09 (0.73)	$P<0.001$
Rural residents of Alberta	2.48 (83)	2.37 (0.75)	

4.3. Current and desired levels of policy influence

Finally, respondents were asked to rate the current level of public input into forest management activity of a number of different organisations. A four-point scale ranging from 'no influence' = 1 to 'a lot of influence' = 4 was developed to measure the respondent's current beliefs about the influence of various policy actors on forest management decisions. These included both

Table 8
Comparison of means scores measuring attitudes towards desired organisational influence on forest management

	PRAGs	General population	Significance
Forest scientists	2.53 (0.56)	2.76 (0.46)	$P<0.001$
Rural residents of Alberta	2.53 (0.56)	2.59 (0.56)	
Recreation users	2.17 (0.66)	2.08 (0.79)	
Conservation or environmental groups	2.10 (0.71)	2.44 (0.69)	$P<0.001$
Provincial government	2.01 (0.58)	2.07 (0.72)	
First Nations	1.90 (0.76)	2.08 (0.79)	
Urban residents of Alberta	1.89 (0.77)	2.29 (0.71)	$P<0.001$
Forestry companies	1.84 (0.63)	1.66 (0.74)	$P<0.05$
Federal government	1.82 (0.67)	1.85 (0.76)	
Oil and gas industry	1.50 (0.59)	1.45 (0.62)	

levels of government, the forestry and energy industries, forest scientists, conservation or environmental groups, First Nations, recreation users, and urban and rural residents. Using the same scale, respondents were also asked how much influence these policy actors *should* have.

Both PRAGs and the general population perceive that the provincial government and the forest industry have the most influence on forest management decisions. The only other organisation identified as having strong degree of policy influence was the energy industry. Forest scientists, conservation or environmental groups, and First Nations were all perceived as having similarly modest levels of influence. The two notable statistically significant differences between the PRAG members and the general public were on their perceptions of influence of the federal government and urban residents. The general public thought that the federal government had a far greater influence on the forest management process than did PRAG members. Conversely, PRAG members ascribed a higher influence level to Alberta urban residents (Table 8).

The next set of statements assessed respondents attitudes about the level of influence the same organisations as identified above, *should* have. Both groups indicated that forest scientists stand out as the group who should have more influence in forest management decisions. This perception was followed by the influence of rural residents and conservation groups. Not surprisingly, only a small percentage thought that the government and industry groups should have more influence.

In summary, comparing the groups revealed some interesting differences: the general public was more likely than PRAG members to indicate that forest scientists, conservation groups, and urban residents should have relatively more influence than PRAG members, and also that the forest industry should have less influence on forest management decisions. Both groups indicated the same desired levels of organisational influence for the provincial and federal governments, rural residents, and the oil and gas industry.

There are distinct differences between PRAG members and the general public in nearly all aspects including socio-demographic characteristics, attitudes towards public involvement and influence on forest management. If, as the literature reviewed raise, the similarities between the public and those involved in public involvement process are crucial for representation, then PRAGs are indeed poor forums for public involvement. However, in moving beyond descriptive representation, we suggest the possibility that this is not necessarily the case.

5. Discussion and conclusion: moving beyond descriptive representation

The increased demand by the public for direct involvement in the policy process has become a common phenomenon across all sectors from agri-

culture, to health, to transportation. Furthermore, the demands are also varied ranging from national issues such as the participation in National Round Table on Forestry (Canadian Council of Forest Ministers, 1999) to localised concerns such as the development of a forestry company's 25-year Forest Management Plan. The direct involvement by citizens in decisions particularly within local contexts raises important questions about the representativeness of this involvement. Local level public involvement groups developed and fostered by the forest industry are widely criticised as ineffective because they fail to correspond to the demographics or the beliefs, values, and behaviour of the public whom they represent. However, such a criticism is too simplistic and does not adequately address what questions should be asked when considering what constitutes a representative forum.

In this paper, striking differences between members of Public Forest Resource Advisory Groups (PRAGs) and the larger provincial level public beliefs, values, and attitudes were found. However, upon examining the concept of representation in more detail, it was found that they are not necessarily poor but different forms of representation. It is possible that differences such as those uncovered between characteristics and attitudes of the larger provincial population and PRAG members may matter little to the ultimate outcomes of forest management.

This paper argued that descriptive representation is one of the weakest forms of representation because it limits the representative to a passive role in which his or her characteristics determine the type of input provided. The research programme advocated in this paper shifts the emphasis from a representation based simply on standing for to that of acting for. The representative under these two scenarios becomes a dynamic actor involved in a particular activity. This sheds a different light on the (functions) of groups such as PRAG leading to a reconsideration of public involvement criteria.

Under the criteria set out in the representation of subjective interests, PRAGs becomes a gathering of many competing subjective interests (i.e. the forest industrialists, environmentalists, recreational groups, chambers of commerce). Ideally, PRAG members should put aside their differences in order to promote the most sustainable strategy for its sponsoring forestry company. Likewise, it would be assumed that the individual firms would work in such a forum where its narrow profit maximisation would be 'filtered' through the PRAG process for the greater good of the whole.

Burke's concept of representation, as unattached objects, is also attractive because those who are uninterested are also represented. For example, a person living in an urban centre may not be interested in forestry issues. However, it is still imperative that the interests of the forests and the nation be considered which, in turn, would benefit the welfare of that uninterested urbanite. This is in direct opposition to common conceptions linked to descriptive representation that tend to emphasise local interests.

By introducing subjective and objective approaches to understanding representation, this paper will allow both the researcher and the forest-level practitioners the opportunity to consider public participation strategies in these different contexts. Future research in this area should concentrate on the consequences of such applications and improving public participation opportunities. That is, does a public involvement strategy based upon the representation of subjective attached interests have different outcomes than a strategy based upon unattached objective interests? This paper has invited such questions and debate to be considered.

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